DOCUMENT RESUME

ED 360 051 PS 021 514

AUTHOR Dubow, Eric F.; And Others
TITLE Development and Evaluation of a School-Based Stress and Coping Curriculum.
PUB DATE Mar 93
NOTE 14p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (60th, New Orleans, LA, March 25-28, 1993).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attitude Change; *Coping; *Early Intervention; Elementary School Students; Grade 4; Intermediate Grades; *Preadolescents; Problem Solving; Program Evaluation; *Self Efficacy; *Stress Management; Student Attitudes
IDENTIFIERS Childhood Experiences; *I Can Do Program

ABSTRACT

This study evaluates the "I Can Do" program, a 13-session preventive intervention curriculum designed to teach children methods of coping with five stressful events or experiences (parental separation or divorce; loss of a loved one; spending time in self-care; move to a new home or school; and feeling ethnically, socially, or intellectually different). The program also taught children how to help peers cope with the same experiences. Targeted coping skills included the use of social support and social problem-solving skills. Subjects were 92 fourth-graders who were assigned to the Immediate Intervention Group (participating in the fall semester) and the Delayed Intervention Group (participating in the following spring semester). Subjects completed several measures before and after their participation in the program, including a fact and attitudes measure, a self-efficacy measure, and a problem-solving measure. Results showed significant immediate or delayed effects on improvement in children's self-efficacy for coping with stressors. (MM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Development and Evaluation of a School-Based Stress and Coping Curriculum

Eric F. Dubow, Debbie Schmidt, Joelle McBride, David Baskind,
Mari Ippolito, and F. Lynne Merk
Bowling Green State University

ED360051

PS 021514

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Eric F. Dubow
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

This research was presented at the biennial meeting of the Society for Research in Child Development in New Orleans, March, 1993.

Correspondences regarding this research should be addressed to the first author at Bowling Green State University, Department of Psychology, Bowling Green, OH 43403.

BEST COPY AVAILABLE

Abstract

Four fourth grade classrooms participated in a 13-session preventive intervention curriculum designed to: 1) prepare children to cope with several stressful events that often occur during childhood (e.g., parental separation/divorce, loss of a loved one, spending time in self-care); and 2 teach children how to help peers experiencing the stressors. Targeted coping skills included the use of social support and social problem-solving skills. Results showed significant immediate and/or delayed effects on improvement in children's self-efficacy for coping with the stressors. Implications for the design and evaluation of school-based competence-building programs are discussed.

Children who are exposed to an accumulation of stressful life events (e.g., parental separation/divorce, loss of a loved one) are at risk for emotional and behavioral problems (e.g., Dubow & Tisak, 1989; Sterling et al., 1985). However, the relation between exposure to stressful life events and adjustment problems is modest, suggesting that some children are not negatively affected by such experiences. Researchers have focused on resources that might protect children from the potentially negative effects of stressful life events (see Cowen & Work, 1988; Rutter, 1987). Two such resources are social support and social problem-solving skills.

Researchers and educators have highlighted the need for school-based interventions to "provide young children with skills and competencies that enhance their ability to cope, and help them to develop a sense of efficacy that becomes an active part of their future resources..." (Cowen et al., 1990).

The present study reports on a school-based curriculum designed to teach children methods to cope with five stressful events/experiences; national and local statistics suggest that these stressful experiences occur to a significant number of children: parental separation/divorce; loss of a loved one; move to a new home/school; spending significant time in self-care; feeling "different"--ethnically, socially, intellectually. The "I Can Do" program is a primary prevention competence-building intervention targeted to all children in regular fourth grade classrooms. It is intended to teach children to apply coping skills (e.g., seeking social support, and a six-step problem-solving technique) to specific stressors that they or their peers are likely to face in the future.

Method

Subjects

Ninety-two fourth graders (54% girls, 86% white, and 60% from two-parent homes) from two classrooms in each of two schools participated. Within each school, one classroom was randomly assigned to the Immediate Intervention Group (N = 44), and received the program in the Fall; the other classroom in each school was assigned to the Delayed Intervention Group (N = 48), and received the program in the Spring. There were no group differences in gender, race, or number of parents in the home.

Procedures

The "I Can Do" program. The "I Can Do" program is a 13-session (45 minutes per session) curriculum designed to teach children ways to cope with five selected stressful events/experiences that occur to a significant number of children. Children learn to use various coping skills if they are exposed to each stressful situation, and how to help peers who may be experiencing the stressors. Each session was co-led by two clinical psychology graduate students. (See **Table 1** for a full description of the curriculum.)

Evaluation Design and Measures

Children completed measures before the Immediate Intervention group received the program in the Fall (pretest), at the end of the Fall semester (posttest), and again at the end of the Spring semester, after the Delayed Intervention group received the program (follow-up).

1) Facts/Attitudes measure: a 14 item true-false survey about different aspects of the five stressors. Sample item: "Often when parents get divorced, their children can talk them into getting back together." (Coefficient alphas: .47-.65 across testings.)

2) Self-efficacy measure: a 19-item measure in which children rate their perceived level of difficulty (1=very hard to 4=very easy) in enacting positive coping responses to a given stressor. Sample item: "Your parents just told you that your best friend's uncle died. Calling your friend to talk about the death would be _____ for you".

(Coefficient alphas: .80-.87 for the total self-efficacy measure; .41-.75 for the subscales for each stressor.)

3) Problem-solving measure: six vignettes which ask the child to list everything he or she might do or say in the given situation. Children were allowed 3 minutes per vignette. A vignette was written for each of the five stressors, and a sixth vignette (parents arguing with each other) was written to elicit "feeling helpers."

Sample vignette: "Your parents are out for the evening and they have left you in charge while they are gone. You are watching television when a man knocks on the door. He says that he has come to fix the refrigerator, but your parents did not tell you anything about this. Write down all the things you might say or do in this situation."

The effectiveness of each solution was rated on a 5-point scale. For each vignette, a problem-solving composite score was derived by summing the effectiveness ratings for all of the child's solutions to that vignette. A total problem-solving composite score was also calculated by averaging these six scores (coefficient alphas: .81-.86 across testings).

4) Social support network size: children listed the people they would seek help from for very hard problems. Three scores were calculated: total family members, total nonfamily members, and total network size.

5) Process evaluation: extensive information on the "process" of the Fall program (e.g., children's interest, leaders' adherence to the curriculum) from the group leaders, children, and classroom teachers.

Results

Fall Program Results

Repeated measures ANOVAs compared the Immediate and Delayed Intervention groups on pretest to posttest changes in all outcome measures. Table 2 shows marginal or significant Time X Group interactions for: 1) the Self-Efficacy Total score, and for self-efficacy in coping with the Death and Divorce situations; and 2) the Problem-Solving Total score, and for problem-solving scores for the Death, Differences, and Divorce situations, and Feeling Helpers. Follow-up analyses computed separately for each group showed that children receiving the program improved significantly more in these scores than children not receiving the program.

A significant Time X Group interaction for Total Size of social support network showed, counterintuitively, that there was a larger increase in this measure for children who had not yet received the program.

Fall Program: Process Evaluation

Group leaders reported: close adherence to the program manual; ease of following the manual and implementing the activities in each unit; feeling comfortable presenting the material; and that the activities were age-appropriate, met their stated goals, and held the students' interests.

Children reported: high levels of interest in the material; that the material was novel; that they understood the material; and that they could use the information to help themselves or a friend who might experience the stressor. Less than half of the children said that they talked with their friends or parents about the material.

Feedback from teachers and group leaders led to slight revisions in the Spring program curriculum: more time devoted to "hands-on" activities, less time to group discussions and didactic material.

Spring Program Results

Between-groups analyses. Repeated measures ANOVAs for the Spring program compared the Immediate and Delayed Intervention groups on posttest to follow-up changes. Table 3 shows marginal or significant Time X Group interactions for: 1) self-efficacy for coping with Divorce; and 2) all Problem-Solving scores. Children who received the Spring program improved significantly more in these measures compared to children in the Immediate Intervention group.

Within-groups analyses. We examined repeated measures analyses separately for each group because it was possible that both groups might improve from posttest to follow-up: 1) the Delayed Intervention group should improve because they had just received the program; and 2) the Immediate Intervention group might show continued or delayed improvement due to consolidation of the skills they learned in the Fall program.

Table 3 shows that children in the Delayed Intervention group improved in: Facts/Attitudes; nearly all Self-Efficacy scores; all Problem-Solving scores; and two Social Support scores. Children in the Immediate Intervention group showed no change in Facts/Attitudes; they continued to improve in Self-Efficacy (Total), and showed delayed improvement in self-efficacy to cope with Differences, Self-Care, and Moving situations; they showed no change in most of the Problem-Solving scores; and they increased in one Social Support score.

(There were few significant Time X Group X School or Time X Group X Gender interactions, suggesting that the program effects noted above were equivalent across schools and genders.)

Discussion

One goal that was accomplished by the "I Can Do" program was improvement in children's ability to generate effective solutions to stressful situations. It is hypothesized that the development of a repertoire of effective solutions

will allow the child to formulate strategies to cope with the stressors, and thus experience less frustration and threat when actually faced with the stressors.

Another goal that was accomplished was improvement in children's self-efficacy to implement effective solutions to the targeted stressors. The curriculum provided children with opportunities to apply the general coping skills to the stressors, modeling of behaviors by watching live and videotaped portrayals of successful coping, and enjoyable activities to increase motivation to perform the instructed behaviors. Research has shown that children are more likely to select behaviors for which they have high self-efficacy (e.g., Ollendick & Schmidt, 1987). It is hypothesized that self-efficacy to implement effective solutions will translate into selection of these solutions when the children actually face these stressors.

An important influence on the success of the implementation of the program was the close working relationship with the classroom teachers. Their input was a critical component not only in terms of program acceptance by the children and parents, but more importantly, in terms of curriculum revision which led to a stronger program.

Future evaluations might include the collection of outcome measures from other sources (e.g., teachers, parents), and long-term assessment of how the children actually cope with stressors that they face in the future.

References

Banks, A., & Evans, N. (1980). Goodbye, house: A kids' guide to moving. NY: Harmony Books.

Cowen, E. L., Hightower, A. D., Pedro-Carroll, J., & Work, W. (1990). School-based models for primary prevention programming with children. In R. P. Lorion (Ed.), Protecting the children: Strategies for optimizing emotional and behavioral development (pp. 133-160). NY: Hayworth.

Cowen, E. L., & Work, W. C. (1988). Resilient children, psychological wellness, and primary prevention. American Journal of Community Psychology, 16, 591-607.

Dubow, E. F., & Tisak, J. (1989). The relation between stressful life events and adjustment in elementary school children: The role of social support and social problem-solving skills. Child Development, 60, 1412-1423.

National Education Association. (1980). Unfinished stories. Washington, D. C.: Author.

Ollendick, T. H., & Schmidt, C. R. (1987). Social learning constructs in the prediction of peer interaction. Journal of Clinical Child Psychology, 16, 80-87.

Pedro-Carroll, J. (1985). The children of divorce intervention program: Procedures manual. Rochester, NY: University of Rochester, Center for Community Study.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. American Journal of Orthopsychiatry, 57, 316-331.

Short, J. L., & Ayers, T. S. (1990). Stress management and alcohol awareness program: A preventive intervention program for children with problem drinking parents. Tempe, AZ: Program for Prevention Research, Arizona State University.

Sterling, S., Cowen, E. L., Weissberg, R. P., Lotyczewski, B., & Boike, M. (1985). Recent stressful life events and young children's school adjustment. American Journal of Community Psychology, 13, 87-98.

Swan, H., Briggs, S. M., & Kelso, M. (1982). I'm in charge: A self care course for parents and children. Olathe, KS: Johnson County Mental Health Center.

Table 1

Description of the I CAN DO Stress and Coping Curriculum

Goals: Teach children ways to cope with selected stressful events/ experiences that occur to a significant number of children

Increase knowledge about stressors

Learn problem-solving skills to help self and peers exposed to the stressors

Increase self-efficacy to implement effective coping strategies

Broaden social support networks

Curriculum Format: 13 45-minute sessions, six units; co-led by two clinical psychology graduate students

Unit 1: **General coping skills** (3 sessions)

a) Learn six-step problem-solving sequence
I=identify the problem;
C=what choices are available;
A=pay attention to the consequences;
N=narrow down the choices to one;
D=do what you decide;
O=observe the outcome.

b) Learn benefits of seeking social support

c) Generate "feeling helpers" (strategies to make oneself feel better when faced with uncontrollable stressors.

Unit 2: **Coping with loss of a loved one** (2 sessions)
Unit 3: **Coping with feeling "different"** (e.g., ethnically physically, socially different) (2 sessions)
Unit 4: **Coping with moving to a new home/school** (2 sessions)
Unit 5: **Coping with self-care** (i.e., spending significant time at home without adult supervision (2 sessions)
Unit 6: **Coping with parental separation/divorce** (2 sessions)

(For Units 2-6, each stressor is introduced, often with a film or short story; then, children practice applying the general coping skills to the stressor)

Sources: Some activities were adapted from other interventions for children who have already experienced a given stressor (Banks & Evans, 1980; National Education Association, 1980; Pedro-Carroll, 1985; Short & Ayers, 1990; Swan, Briggs, & Kelso, 1982).

Table 2

Fall Program Results: Pretest and Posttest Means on the Facts/Attitudes, Self-Efficacy, and Problem-Solving Measures, and Repeated Measures ANOVAs Results

Measure	Immediate intervention group[a] Pre	Post	Delayed intervention group[b] Pre	Post	F value Time X Group
Facts/attitudes	10.32	11.90**	10.37	11.47**	1.51
Self-efficacy					
Total	47.03	52.95*	48.34	48.63	2.79+
Death	7.50	9.34**	8.12	7.93	6.06*
Differences	9.30	9.93	9.73	10.06	.25
Divorce	8.25	10.75**	8.50	8.97	4.78*
Self-care	8.53	8.66	8.23	8.47	.04
Moving	10.41	10.72	10.27	10.13	.39
Problem solving					
Total	8.12	14.35**	8.11	9.93*	12.34**
Feeling helpers	9.50	24.89**	7.52	12.41**	15.16**
Death	10.53	15.73*	10.38	11.00	2.65+
Differences	8.38	13.48**	8.88	10.00	5.71*
Divorce	6.44	11.26**	7.17	8.48	5.00*
Self-care	6.29	10.50**	6.54	8.35	2.12
Moving	8.17	12.43**	8.40	9.88	2.58
Social support network size					
Total family	3.39	5.07**	2.69	5.15**	1.25
Total nonfamily	2.64	4.21**	2.50	4.81**	1.72
Total members	6.04	9.32**	5.19	9.96**	3.92+

Note. Only those children who were present for both pre- and posttesting were included in the analyses; all of these children attended at least half of the sessions. $N = 32$ for the Immediate Intervention group, and $N = 30$ for the Delayed Intervention Group. Only one group difference was significant at pretest: the Immediate Intervention group named more total family members than the Delayed Intervention group, $t(70)=2.44$, $p<.05$.

[a]The Immediate Intervention Group received the curriculum in the Fall, that is, between the pre-and post-assessments. [b]The Delayed Intervention Group did not receive the curriculum between pre-and post-assessments.

+$p<.10$. *$p<.05$. ** $p<.01$.

Table 3

Spring Program Results: Posttest and Follow-Up Means on the Facts/Attitudes, Self-Efficacy, and Problem-Solving Measures, and Repeated Measures ANOVAs Results

Measure	Immediate intervention group[a]		Delayed intervention group[b]		F value
	Post	Follow-up	Post	Follow-up	Time X Group
Facts/attitudes	11.88	11.74	11.54	12.13+	2.40
Self-efficacy					
Total	51.77	57.18*	47.13	53.51**	.10
Death	9.17	9.57	7.79	8.72+	.37
Differences	9.97	11.40**	9.41	10.08	.76
Divorce	10.17	10.80	8.69	10.79**	3.23+
Self-care	8.29	10.06**	8.26	9.36**	1.68
Moving	10.89	12.00**	9.90	11.26**	.19
Problem solving					
Total	14.18	12.45+	9.58	14.03**	20.99**
Feeling helpers	22.71	19.59	11.89	20.58**	17.06**
Death	16.06	14.03	10.87	13.87**	7.54**
Differences	13.70	11.12	9.26	12.45*	6.82*
Divorce	11.81	10.61	9.35	13.27*	4.80*
Self-care	10.17	9.23	7.55	11.92**	10.65**
Moving	12.94	10.41*	8.76	12.34**	9.31**
Social support network size					
Total family	5.45	5.61	4.59	5.22	.22
Total nonfamily	4.12	5.39+	4.86	5.95+	.02
Total members	9.61	11.00	9.61	11.33*	.09

Note. Group Ns differ from the Fall program results due to new school transfers. Only those children who were present for both post- and follow-up testing were included in the analyses; all of these children attended at least half of the sessions. N = 35 for the Immediate Intervention group, and N = 39 for the Delayed Intervention Group.

[a]The Immediate Intervention Group received the curriculum in the Fall (between the pre- and post- assessments). Follow-up testing thus represents a 5-month follow-up. [b]The Delayed Intervention Group received the curriculum in the Spring only (between the post-and follow-up assessments).

+p<.10. *p<.05. ** p<.01.